



PTO/SB/08A (08-03)

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Sheet 1 of 3

Complete if Known

Application Number	10/656,369
Filing Date	08 September 2003
First Named Inventor	Vitalii Silin
Art Unit	1641
Examiner Name	Nelson Yang
Attorney Docket Number	

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
M	1	US- 4,071,409	Jan., 1978	Messing et al.	195/63
	2	US- 4,562,157	Dec., 1985	Lowe et al.	435/291
	3	US- 4,690,715	Sep., 1987	Allara et al.	148/6
	4	US- 4,908,112	Mar., 1990	Pace	204/299
	5	US- 4,973,493	Nov., 1990	Guire	427/2
	6	US- 4,987,032	Jan., 1991	Miyasaka et al.	
	6	US- 5,079,600	Jan., 1992	Schnur et al.	357/4
	7	US- 5,096,807	Mar., 1992	Leaback	435/6
	8	US- 5,143,854	Sep., 1992	Pirrung et al.	438/518
	9	US- 5,154,808	Oct., 1992	Miyasaka et al.	
	10	US- 5,160,597	Nov., 1992	Colapicchioni et al	204/403
	11	US- 5,242,828	Sep., 1993	Bergstrom et al.	435/291
	12	US- 5,252,743	Oct., 1993	Barrett et al	548/303
	13	US- 5,294,369	Mar., 1994	Shigekawa et al.	252/313.
	14	US- 5,304,487	Apr., 1994	Wilding et al.	428/420.
	15	US- 5,342,692	Aug., 1994	Ribi	
	16	US- 5,384,261	Jan., 1995	Winkler et al.	436/518
	17	US- 5,405,766	Apr., 1995	Kallury et al.	
	18	US- 5,405,783	Apr., 1995	Pirrung et al.	436/518

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M I I M	1	WO9850773	Nov., 1994	WO.		
	2	WO9535505	Dec., 1995	WO.		
	3	WO 96/02830	Feb., 1996	WO.		
	4	WO 96/10178	Apr., 1996	WO.		
	5	WO 96/26432	Aug., 1996	WO.		
	6	WO 96/29629	Sep., 1996	WO.		

Examiner Signature	<i>Nelson Yang</i>	Date Considered	8/7/04
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Sheet 2 of 3**Complete if Known**

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First Named Inventor	Vitalii Silin
Art Unit	1641
Examiner Name	Nelson Yangf
Attorney Docket Number	

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M	19	US- 5,412,087	May., 1995	McGall et al.	536/24.
	20	US- 5,429,708	Jul., 1995	Linford et al.	216/66
	21	US- 5,445,934	Aug., 1995	Fodor et al.	435/6
	22	US- 5,472,881	Dec., 1995	Beebe et al.	436/94
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	30	US- 5,603,351	Feb., 1997	Cherukuri et al	137/597
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	35	US- 5,629,213	May., 1997	Kornguth et al.	436/518
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	37	US- 5,637,469	Jun., 1997	Wilding et al.	435/7

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M	7	WO 96/38726	Dec., 1996	WO.		
	8	WO 96/39937	Dec., 1996	WO.		
	9	WO 97/07429	Feb., 1997	WO.		
	10	WO 97/36681	Oct., 1997	WO.		
	12	WO 97/41424	Nov., 1997	WO.		
	13	WO 97/41425	Nov., 1997	WO.		

Examiner Signature	<i>Nelson Yangf</i>	Date Considered	8/2/04
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M	38	US- 5,677,195	Oct., 1997	Winkler et al.	436/518
	39	US- 5,677,196	Oct., 1997	Herron et al.	436/518.
	40	US- 5,681,484	Oct., 1997	Zanzucchi et al.	216/2.
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	42	US- 5,700,642	Dec., 1997	Monforte et al.	435/6
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	44	US- 5,726,026	Mar., 1998	Wilding et al.	
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	47	US- 5,776,674	Jul., 1998	Ulmer	
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	50	US- 5,866,345	Feb., 1999	Wilding et al.	
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	52	US- 5,928,880	Jul., 1999	Wilding et al.	
AM	53	US- 6,329,209	Dec. 2001	Wagner et al.	436/518
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		US-			

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		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				
M	14	WO9823948	Jun., 1998	WO.		
M		WO9839481	Sep., 1998	WO.		

Examiner Signature		Date Considered	8/9/04
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		Application Number	10/656,369
		Filing Date	08 September 2003
		First Named Inventor	Vitalii Silin
		Art Unit	1641
		Examiner Name	Nelson Yang
Sheet 1	of 7	Attorney Docket Number	

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
My		SIGAL et al. (1996). A self-assembled monolayer for the binding and study of histidine-tagged proteins by surface plasmon resonance. Anal. Chem. 68:490-497.*	
		NOCK et al. (1997). Reversible, site-specific immobilization of polyarginine-tagged fusion proteins on mica surfaces. FEBS Letters. 414:233-238.*	
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		ELKINS et al. (1991). Multianalyte microspot immunoassay-microanalytical "compact disk" of the future. Clin. Chem. 37(11):1955-1967.*	
		KRICKA (1998). Miniaturization of analytical systems. Clin. Chem. 44(9):2008-2014.* Ekins (1998). Ligand assays: from electrophoresis to miniaturized microarrays. Clin. Chem.	
My		SILZEL et al. (1998). Mass-sensing, multianalyte microarray immunoassay with imaging detection. Clin. Chem. 44(9):2036-2043.*	

Examiner Signature		Date Considered	6/9/07
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M		NIEMEYER et al. (1994). Oligonucleotide-directed self-assembly of proteins: semisynthetic DNA-streptavidin hybrid molecules as connectors for the generation of macroscopic arrays	
		NIEMEYER et al. (1999). DNA-directed immobilization: efficient, reversible, and site-selective surface binding of proteins by means of covalent DNA-streptavidin conjugates. An	
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M		STEINNICKE et al. "Biochemical characteristics of caspases-3, -6, -7, and -8" J. Biol. Chem. 272: 25719-25723 (1997).	

Examiner Signature	<i>M. Yang</i>	Date Considered	8/9/04
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M		TALANAIN et al. "Substrate specialities of capsases family proteases" J. Biol. Chem. 272: 9677-9682 (1997).	
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		BECKER et al., "Production of separation-nozzle systems for uranium enrichment by a combination of x-ray lithography and galvanoplastics," Naturwissenschaften, 69:520-523 (198	
M		CLOAD et al., "Development of improved tRNAs for in vitro biosynthesis of proteins containing unnatural amino acids," Chemistry & Biology 3:1033-1038 (1996).	

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M		CONDRA et al., "In vivo emergence of HIV-1 variants resistant to multiple protease inhibitors," Nature, 374:569-571 (1995).	
		DAMMER et al., "Specific antigen/antibody interactions measured by force microscopy," Biophysical Journal, 70:2437-2441 (1996).	
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M		HO et al., "Characterization of human immunodeficiency virus type 1 variants with increased resistance to a C.sub.2 -symmetric protease inhibitor," Journal of Virology, 68:201	

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

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Application Number	10/656,369
Filing Date	08 September 2003
First Named Inventor	Vitalii Silin
Art Unit	1641
Examiner Name	Nelson Yang
Attorney Docket Number	

Sheet 5

of

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NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		HOCHULI et al., "Genetic approach to facilitate purification of recombinant proteins with a novel metal chelate adsorbent," Biotechnology, 6:1321-1325 (1988).	
		KAPLAN et al., "Selection of multiple human immunodeficiency virus type 1 variants that encode viral proteases with decreased sensitivity to an inhibitor of the viral protease	
		KORANT et al., "The HIV protease and therapies for aids," Advances in Experimental Medicine and Biology, 421:279-284 (1997).	
		LINFORD et al., "Alkyl monolayers on silicon prepared from 1-alkenes and hydrogen-terminated silicon," J. Am. Chem. Soc., 117:3145-3155 (1995).	
		LOEB et al., "Complete mutagenesis of the HIV-1 protease," Nature, 340:397-400 (1989).	
		LOUIS et al., "Autoprocessing of the HIV-1 protease using purified wild-type and mutated fusion proteins expressed at high levels in Escherichia coli," Eur. J. Biochem., 199:3	
		MRKSICH et al., "Controlling cell attachment on contoured surfaces with self-assembled monolayers of alkanethiolates on gold," Proc. Natl. Acad. Sci. USA, 93:10775-10778 (1996)	
		MOORE et al., "Peptide substrates and inhibitors of the HIV-1 protease," Biochemical and Biophysical Research Communications, 159:420-425 (1989).	
		NOCK, "Reversible, site-specific immobilization of polyarginine-tagged fusio proteins on mica surfaces," FEBS, 414:233-238 (1997).	
		NOREN et al., "A general method for site-specific incorporation of unnatural amino acids into proteins," Science, 244:182-188 (1989).	

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Examiner Name	Nelson Yang
Attorney Docket Number	



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NON PATENT LITERATURE DOCUMENTS

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		PRIME et al., "Self-assembled organic monolayers: model systems for studying absorption of proteins at surfaces," Science, 252:1164-1167 (1991).	
		ROBERTS et al., "Rational design of peptide-based HIV proteinase inhibitors," Science, 248:358-361 (1990).	
		SCHOCK et al., "Mutational anatomy of an HIV-1 protease variant conferring cross-resistance to protease inhibitors in clinical trials," The Journal of Biological Chemistry, 27	
		SINGHVI et al., "Engineering cell shape and function," Science, 264:696-698 (1994).	
		SKALKA, "Retroviral proteases: first glimpses at the anatomy of a processing machine," Cell, 56:911-913 (1989).	
		SUNDBERG et al., "Spatially-addressable immobilization of macromolecules on solid supports," J. Am. Chem. Soc. 117:12050-12057 (1995).	
		WAGNER et al., ".omega.-functionalized self-assembled monolayers chemisorbed on ultraflat Au(111) surfaces for biological scanning probe microscopy in aqueous buffers," J. Vac	
		WAGNER et al., "Formation and in Situ modification of monolayers chemisorbed on ultraflat template-stripped gold surfaces," Langmuir, 11(10):3867-3875 (1995).	
		WAGNER et al., "Bioreactive self-assembled monolayers on hydrogen-passivated Si(111) as a new class of atomically flat substrates for biological scanning probe microscopy," Jo	
		WAGNER et al., "Covalent immobilization of native biomolecules onto Au(111) via N-hydroxysuccinimide ester functionalized self-assembled monolayers for scanning probe microscop	

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				Attorney Docket Number	
Sheet	7	of	7		

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Examiner Signature	W/son y y	Date Considered	8/9/84
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